



Storm Water: Federal Enforcement and Compliance for Construction Activities

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The Environmental Impacts of Storm Water

Impacts of Storm Water

- Storm water from urban areas can carry high levels of pollutants into storm sewers and adjacent rivers, streams, and lakes
 - Mud/Sediment
 - Oil and Grease
 - Suspended Solids
 - Nutrients
 - Heavy Metals
 - Pathogenic Organisms
 - Toxins
 - Trash and other Waste Materials



Impacts of Storm Water

- Sediment is the primary pollutant of concern
- An estimated ~6,700 pounds per acre of sediment runs off a construction site with no controls, which is approximately 107 times greater than pre-construction amounts.



Impacts of Storm Water

- Sediment laden runoff results in:
 - Increased turbidity and decreased oxygen in the receiving water body
 - Destruction of stream habitats for fish and other aquatic organisms
 - Increased difficulty and cost of drinking water treatment
 - Loss of drinking water reservoir storage capacity
 - Increased stream bank erosion
 - Negative aesthetic impacts

Impaired Waters

Segment ID	Waterbody Name	Basin	Impairment
LP2-L0110	Bluestem Lake	Lower Platte River Basin	Bacteria, Nutrients & Sediment
LP2-L0240	East Twin Lake	Lower Platte River Basin	Sediment
LP2-L0260	West Twin Lake	Lower Platte River Basin	Nutrients & Sediment
MT1-L0100	Standing Bear Lake	Missouri Tributaries River Basin	Mercury & sediment
MT1-L0120	Glenn Cunningham Lake	Missouri Tributaries River Basin	Sediment
MT-ND	Candlewood Lake	Missouri Tributaries River Basin	Sediment & Nutrients
NE2-L0090	Iron Horse Trail Lake	Nemaha River Basin	Mercury, Nutrients & Sediment
LP2-L0040	Holmes Lake	Lower Platte River Basin	Nutrients & Sediment
LP2-L0090	Yankee Hill Lake	Lower Platte River Basin	Nutrients & Sediment
LP2-L0130	Conestoga Lake	Lower Platte River Basin	Nutrients & Sediment

Storm Water

A National Compliance and
Enforcement Priority

Compliance and Enforcement National Priorities

- The EPA's Office of Enforcement and Compliance (OECA) established storm water as a "Wet Weather" national priority for federal fiscal years (FY) 2005 through 2007.

Clean Water Act: “Wet Weather” Priorities

- Concentrated Animal Feeding Operations (CAFOs)
- Combined Sewer Overflows (CSOs)
- Sanitary Sewer Overflows (SSOs)
- **Storm Water**

Why was storm water selected as a national priority?

- Selection criteria
 1. Increased national attention could lead to significant environmental benefits;
 2. Existing patterns of non-compliance; and
 3. EPA was well-suited to take action in this strategy area.

Goals

1. Protect public health and environment by minimizing the discharge of polluted storm water to surface waters. The focus sectors with the potential to significantly impact human health or the environment or activities in priority watersheds.
2. Assist states, localities, and tribes in the development and enhancement of their storm water programs by annually conducting training courses and joint inspections.

The Clean Water Act and Storm Water Regulations

The CWA

- The Water Quality Act of 1987
 - Mandated EPA establish a storm water control program
 - A NPDES Program
 - A Phased approach to regulation.
 - Phase I
 - Phase II

How is Storm Water Regulated under the NPDES Program?

- Phase I
 - Regulates discharges from:
 - Medium and large MS4s,
 - Construction activities greater than or equal to 5 acres,
 - Or less than 5 acres, if part of a common plan of development or sale
 - Other industrial activities.

How is Storm Water Regulated under the NPDES Program?

- Phase II
 - Regulates discharges from:
 - Small MS4s,
 - Construction activities greater than, or equal to, 1 acre
 - Or less than 1 acre, if part of a common plan of development or sale

Other Industrial Activities

- Facilities Subject to Standards
- Heavy Manufacturing
- Mining/Oil and Gas
- Hazardous Waste Facilities
- Landfills
- Recycling Facilities
- Steam Electric Power Plants
- Transportation Industries
- Sewage Treatment Plants
- Construction Activity
- Light Industry

“Common plan of development or sale”

- Common plan of development or sale can consist of many small construction projects
 - E.g., different parts of residential subdivision (streets, house lots, areas for parks, schools)
- “Common plan” =
 - Any announcement or documentation (sign, sales pitch, notice, etc.) or,
 - physical demarcation (boundary signs, lot stakes) indicating construction may occur on a specific plot.

NPDES Permits

How do you get a NPDES Permit?

Who must apply?

- Owners or operators of any tract of land where construction will be occurring are required to apply for a storm water NPDES permit if the area which will be disturbed equals or exceeds one acre.

How to apply?

- Submit a Notice of Intent (NPDES Form CSW-NOI)
 - NOI can be obtained from the Nebraska Department of Environmental Quality. Address and telephone number listed on the next slide.
- Appendix C of the Construction Site Storm Water General Permit, contains a description of the information required to be submitted in the NOI.

NDEQ Contact Info.

- Address
 - NPDES Municipal and Industrial Section
Nebraska Department of Environmental Quality
P.O. Box 98922
1200 N Street, The Atrium, Suite 400
Lincoln, NE 68509-8922
- Phone: (402) 471-4220
- Website: <http://www.deq.state.ne.us/>

What the permit requires

- Primary requirement: development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).
- The SWPPP must contain items that are specified in the general permit.
- The permittee is required to comply with all of the applicable requirements listed in the general permit.

Additional regulations...

- NDEQ, City of Lincoln, and the Lower Platte South NRD share compliance and permit application review responsibilities.
- Must submit a NOI to the City of Lincoln, in addition to NDEQ.
 - CSW-NOI (Lincoln)

CSW-NOI (Lincoln)

- The Lower Platte South NRD is the first stop for anyone wanted to develop 1 or more acres of land in the City.
- Before any land disturbance, must:
 - Provide and have approved a:
 - CSW-NOI (Lincoln)
 - SWPPP
- The NOI (Lincoln) and NPDES NOI are combined into one form.

Lower Platte South NRD website

- Contains:
 - NOI/NPDES form
 - SWPPP guidelines and examples
 - SWPPP checklist
 - City of Lincoln Drainage Criteria Manual
 - Urban Erosion and Sediment Control Program
 - Contact information

NRD contact info

- Lower Platte South NRD
3125 Portia Street
PO Box 83581
Lincoln, NE 68508
Phone: (402) 476-2729
- Website:
<http://www.lpsnrd.org/docs/Stormwater/stormwater.htm>

More contact info...

- City of Lincoln

Public Works & Utilities Department

1001 North 6th Street

Lincoln, NE 68508

Phone: (402) 441-7711

Website:

<http://www.lincoln.ne.gov/city/pworks/watshed/erosion/index.htm>

EPA's Relationship to State Programs

- The Clean Water Act (CWA), Section 402 mandates that EPA retain oversight over authorized State NPDES programs.
 - Including Storm water programs
- In addition, EPA retains independent enforcement authority of regulated facilities (CWA Section 309).

EPA's Relationship to State Programs

- In general,
 - Federal storm water regulations establish minimum requirements nationwide.
 - All NPDES permits must meet minimum technical and water quality-based requirements of the CWA
 - Authorized State NPDES programs may impose stricter standards or expand the scope of their storm water program.
 - Permit requirements for authorized NPDES States may vary considerably because of State-specific requirements.



Site Inspections

Where Do We Inspect?

1. A few: response to Individual Complaints
2. A few more: EPA National Enforcement Initiative
3. Most: EPA Region VII's Targeting Process:
 - Team of inspectors goes to a metro area.
 - Reconnaissance of 30-40 construction sites.
 - Detailed inspections of 10-12 “highest priority sites.”

How Do We Identify “High Priority” Sites for Detailed Inspections?

- Reconnaissance (“windshield surveys”) of 30-40 sites in metro.
- Rank sites based on:
 - lack of or inadequate BMPs
 - severe trackout
 - proximity to Waters of the U.S.
 - housekeeping & waste disposal practices
- Detailed inspections of top 10-12 sites.

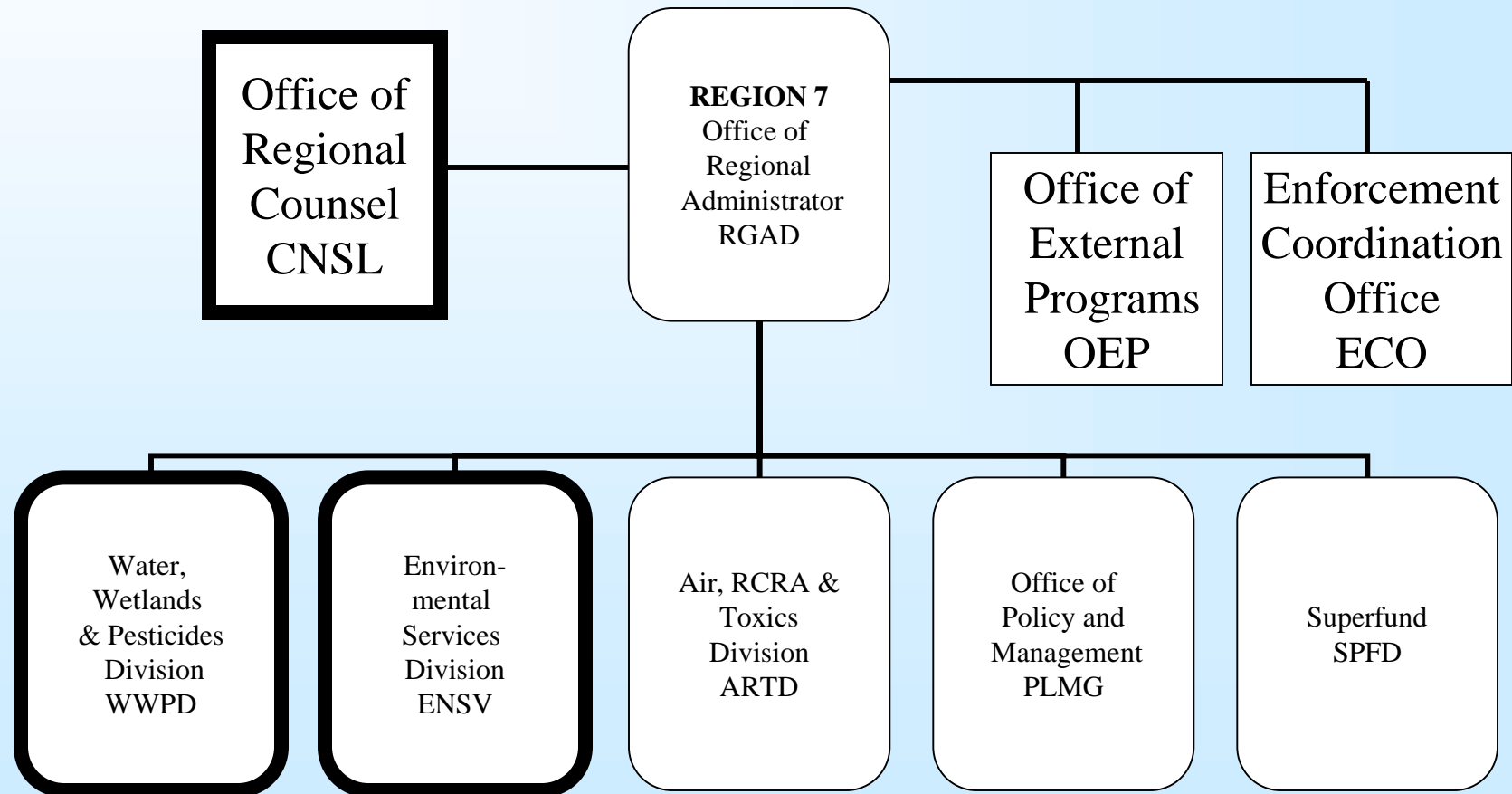




Why Do We Inspect?

- Federal enforcement presence promotes consistency and fairness across States.
- Response to complaints

Who Do We Send?



Who Do We Send?

- Inspectors from Region VII Environmental Services Division
- Engineers and Scientists who do field monitoring, sampling and inspections of NPDES facilities, including:
 - Storm water; construction, industrial
 - Municipal and industrial dischargers
 - Concentrated animal feeding operations

What Do They Review?

- Inspections consist of two parts:
 - I. Records Review
 - II. Site walk-through

What Do They Review?

- Inspections consist of two parts:
 - *I. Records Review*
 - II. Site walk-through

Step I. Records Review:

- Storm Water Pollution Prevention Plan (SWPPP)
- Authorized NOI
- Inspection records
- Other documents?
 - Monitoring reports
 - CSW-START and CSW-END forms

Step I. Records Review:

- *Storm Water Pollution Prevention Plan (SWPPP)*
- Authorized NOI
- Permit
- Inspection records
- Other Documents

A. The SWPPP (“Swip”)

- Site-specific
 - Grading plan usually contains many, not all, of the required elements
- Should be updated as necessary*

* Dog-eared, marked up plans are a good sign!

SWPPP Contents

(Permit Requirements):

- Site map(s)
- A proposed schedule for construction
- An Erosion and Sediment Control Plan
 - Site specific BMPs to minimize sediment from moving off site.
- A Spill Prevention and Response Plan

Non-Structural BMPs

(temporary & permanent):

- Seeding
- Mulching
- Buffer areas
- Preservation of existing vegetation
- Stabilized construction exits

Structural BMPS

(temporary or permanent), e.g.:

- Diversion swales
- Silt fence
- Sediment traps, basins
- Storm drain inlet protection
- Stabilized outlets
- Check dams
- others

Storm Water Detention Basins

- “In general, storm water detention basins need to be used in disturbed drainage areas of 5 acres or more in size.”
- Where slopes are steeper than 3:1, a detention basin may be required for smaller areas.
- Keep in mind, clay soils are unique

Additional Site Management BMPs

- For example:
 - Solid waste and hazardous waste management
 - Storage of construction materials
 - Storage of fuels; secondary containment, spill prevention.
 - Portable toilets

Step I. Records Review:

- Storm Water Pollution Prevention Plan (SWPPP)
- Authorized NOI
- Permit
- *Inspection records*
- Other Documents

Site Inspections

- State: On a regular schedule
 - At least once a month
 - Within 24 hours of each 0.5 inch storm event
- City: On a regular schedule
 - At least once every 7 days
 - Within 24 hours of each 0.5 inch precipitation event

Inspection Reports

- At a minimum:
 - Who conducted the inspections,
 - When the inspections were conducted,
 - The findings of the inspections,
 - Any corrective actions taken, and
 - When the corrective actions were implemented

Step I. Records Review:

- Storm Water Pollution Prevention Plan (SWPPP)
- Authorized NOI
- Permit
- Inspection records
- *Other Documents*

Other Documentation

- **Spill Prevention and Response Plan**
- **Maps**
- **404 Permit**
- **Monitoring/Sampling data**
- **Other records?**

What Do They Review?

- Inspections consist of two parts:
 - I. Records Review
 - *II. Site walk-through*

Step II. Site Walk-through Inspection

- Verify implementation of measures in SWPPP
- Verify BMPs adequate to prevent storm water pollution:
 - Stabilization/non-structural controls
 - structural measures
- Inspect discharge points/receiving stream
- Document findings with video/photos

Most Common Violations:

1. Inadequate SWPPP.

- Issuance of permit does *not* imply that SWPPP is adequate.
- See slides 43-48 or NPDES Permit Requirements.

Most Common Violations (continued...):

2. Failure to adequately document inspections.
 - (See slides 50-51 or NPDES Permit Conditions)
 - Missing periodic inspections and inspections within 24 hours of 0.5 inch rain event
 - Failure to inspect all BMPs at the site
 - Failure to inspect discharge locations
 - Failure to document corrective actions

Most Common Violations (continued...):

3. Severe trackout.

- Storm water carries it either to:
 - stream or lake (violation)
 - or sedimentation basin (requiring cleanout, and ultimately also goes to stream or lake)
- Prevention strategies: parking, location of spoil piles, backfilling of curbs, street cleaning













Most Common Violations (continued...):

4. Inadequate installation/maintenance of BMPs
 - silt fences
 - silt basins
 - storm inlet protection or equivalent



























Most Common Violations (continued...):

5. Inadequate stabilization.









Other Issues:

6. Housekeeping issues

- E.g., trash

7. Concrete washout







Cement
trucks
Clean
out
here





Summary: How can I keep EPA off my back?

1. Get a permit* from the City and the State.
2. Keep the dirt (& other potential storm water contaminants) **ON THE SITE**.

*(And don't forget to abide by the *conditions* of the permit, e.g, SWPPP, inspections, etc...)



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**Violations Have Been
Identified. What Next?**

What Procedures Can You Expect?

An Overview

- Exit Interview at the conclusion of Inspection
- Notice of Potential Permit Violations (NOPV)
- CWA 308 Information Request
- Fraud and False Statements 18 USCS Sec. 1001
- Enforcement Tool Box
 - ESO Eligibility/Criteria/Process
 - Administrative Compliance Orders
 - Traditional Penalty Enforcement (Class I or II)
 - Civil Judicial Action

EPA's Compliance and Enforcement Tools: *Enforcement Response Guide*

- *Revised Interim Clean Water Act Settlement Penalty Policy* (2/28/95) applies to CWA cases
- EPA is drafting supplemental penalty guidance for storm water construction.
- EPA is developing an enforcement response guide for construction.
- Goal: promote consistent enforcement responses to non-compliance with the construction program.

Expedited Settlement Offers (ESO)

- To ensure that timely and consistent enforcement actions are issued and to achieve the goal of deterrence, EPA has developed an ESO for construction activities.

- An ESO is a less resource-intensive mechanism for processing widespread violations associated with relatively small penalty amounts (e.g., minor violators, minor violations).
- Allows for "real time" enforcement in situations where violations can be quickly corrected and a penalty collected within a short amount of time (e.g., generally a few months from discovery of violation).

- Every EPA Region is committed to implementing this approach.
- 2004 Pilot Program in Region 7
- Program undergoing modifications/revisions

Current ESO Eligibility Framework

- Construction 50 acres or less
- 15K cap on calculated penalty
- No evidence of significant environmental impact
- 1st Time Violator
- No evidence of Non-Allowable Discharge

The ESO

- The penalty order
- The worksheet
- 30 days to accept/decline or call

Administrative Compliance Order (aka “the mini-ACO”)

- For sites that qualify:
 - 30 days to comply with noted deficiencies in worksheet
 - Submit compliance verification letter
 - Eligibility for ACO only sites?

I Think You Are Mistaken!

- Please provide us with correct information incl. pictures, documents at the inspection/NOPV/308 request
- During the ESO process

Traditional Class I and II Administrative Penalties

- Traditional cases focus on large-scale developers where there is a corporate-wide pattern of non-compliance.
- These firms fall into two categories of large-scale construction operations: (1) commercial development of "big-box" stores and their associated developers, and (2) large national and residential developers.

- Other (cases not ESO eligible)
- You will have 30 days to file an Answer or a Request for an Extension of Time if a formal action has been taken.
- Penalties/Facts in this forum are negotiable.
- Max Administrative Penalty Authority = \$11k per day for each day of violation not to exceed \$157,500

Traditional Administrative Compliance Orders (Type II: ACO)

- Specific requirements to comply
ie..submissions/review
- Follow the directions within the Order
- More formal Order than the “mini-ACO”

Civil Judicial Cases

- Nationally Significant Cases
- Usually exceed our Administrative Penalty Authority

Oops, I did it again!

- Only 1st time violators eligible for ESO
- History of Recalcitrance Adjustment Factor to Traditional Cases = upwards adjustment of gravity amount between 0-150%

How To Avoid Problems

- Follow your permit requirements
- Implement and MAINTAIN BMPs
- Inspect, Inspect, Inspect

Resources

- 2003 Storm Water Compliance and Enforcement Strategy
 - <http://www.epa.gov/compliance/resources/policies/civil/cwa/stwenfstrategy2003.pdf>
- <http://cfpub.epa.gov/npdes/stormwater/const.cfm>
- <http://www.epa.gov/region07/>
- <http://www.cicacenter.org/>
- <http://www.deq.state.ne.us/>
- <http://www.lincoln.ne.gov/city/pworks/watrshed/erosion/index.htm>
- <http://www.lpsnrd.org/docs/Stormwater/stormwater.htm>

Regional EPA Storm Water Contacts

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